MINNESOTA STATE COLLEGES AND UNIVERSITIES
BOARD OF TRUSTEES

Agenda Item Summary Sheet

Committee: Technology Committee **Date of Meeting:** April 19, 2011

Agenda Item: Service Delivery Strategy

☐ Proposed Policy Change	☐ Approvals Required by Policy	☐ Other Approvals	☐ Monitoring

☒ Information

Cite policy requirement, or explain why item is on the Board agenda:
One of three goals adopted by the Board of Trustees Technology Committee is that the Trustees will sponsor the development of a strategy for delivery of technology services so that these services can be provided efficiently while also sustaining an institution's ability to innovate and differentiate student and community services. The will be a presentation of draft Service Delivery Strategy and an opportunity to obtain feedback from the Trustees.

Scheduled Presenter(s):
Darrel Huish, Vice Chancellor and Chief Information Officer
Ken Ries, Chief Information Officer, Pine Technical College
Chris McCoy, Chief Information Officer, Metropolitan State University

Outline of Key Points/Policy Issues:

Background Information:
Vice Chancellor Huish has worked collaboratively with the Leadership Council Technology Committee and a Chief Information Officer Workgroup to develop the Information Service Delivery Strategy. Other individuals and groups have been consulted to provide perspective and valuable input in the development of this strategy. Vice Chancellor Huish will present the draft document.

BOARD OF TRUSTEES
MINNESOTA STATE COLLEGES AND UNIVERSITIES

INFORMATION ITEM
Service Delivery Strategy

BACKGROUND

Vice Chancellor Huish has worked collaboratively with the Leadership Council Technology Committee and a Chief Information Officer Workgroup to develop the Information Service Delivery Strategy. Other individuals and groups have been consulted to provide perspective and valuable input in the development of this strategy. Vice Chancellor Huish will present the draft document.

Minnesota
STATE COLLEGES
& UNIVERSITIES

OFFICE OF THE CHANCELLOR

WELLS FARGO PLACE
30 7TH ST. E., SUITE 350
ST. PAUL, MN 55101-7804

ph 651.201.1800
fx 651.297.5550
www.mnscu.edu

Service Delivery Strategy
The CIO's Perspective

The Minnesota State Colleges and Universities system is in many ways a young and evolving organization. The breadth of our involvement in the State, as well as the variety of the respective missions of our institutions, makes for exciting challenges in the application of information technology. Because of our relative youth, many areas of information technology are being done from a historical perspective.

However as we look to the future, it is expected that the Minnesota State Colleges and Universities system will continue to experience strong fiscal pressures in the form of increased overall enrollment coupled with flat or declining levels of public support as well as stable rates of tuition. As a result, the Division of Information Technology Services (ITS) could reasonably expect to face no-growth or declining budgets for the next several years. It is therefore envisioned that ITS will focus increasingly on a portfolio of core enterprise (mission-critical) IT services. These services will receive a high-priority commitment to sustaining high availability and high reliability.

In addition to this, we know that higher education must continue to change to be responsive to the educational needs of the country. Minnesota State Colleges and Universities has a large responsibility and opportunity to serve the people of Minnesota. Information Technology will be an integral part of the changing approach to meeting this critical need.

In this situation, ITS acting alone will not be the primary source for IT service innovation. To a large degree, innovation will take place on our campuses. The overarching intent of this service delivery strategy is to be explicit about what will be done once for the entire system and what other services will be done multiple times by consortia or individual institutions. While there is much to be gained from the Service Delivery Strategy document in its current form, it is not the end of the process but the beginning. It is very important to recognize our shared governance structures will be used to create an intentional and collaborative process to further develop and implement this strategy.

Sincerely,

Darrel Huish
Vice Chancellor Information Technology Services

DRAFT

Service Delivery Strategy

Information Technology

Date: April 6, 2011

Minnesota
STATE COLLEGES
& UNIVERSITIES

DRAFT

Table of Contents

DRAFT

Service Delivery Strategy Document

Context and Introduction

This strategy is intended to describe our rationale for delivering IT services either centrally, regionally, or at an individual campus. The overall long-term aim of the strategy is to create a well-understood rationale and method for locating and funding IT services. This strategy is being developed in response to a goal established by the Technology Committee of the Board of Trustees for the Minnesota State Colleges and Universities. The goal is: "The committee will sponsor the development of a strategy for delivery of technology services so that these services can be provided efficiently while also sustaining an institution's ability to innovate and differentiate student and community services."

This strategy is intended to specify an end-state that will take from 3 to 5 years to achieve. The strategy development process is being led by the Vice Chancellor of Information Technology Services in collaboration with the Leadership Council's Technology Committee.

This strategy is intended to align specifically with MnSCU 2011 – 2014 Strategic Direction and Goals. The execution and anticipated contribution outcomes for this strategy are specified in Appendix A.

Strategic Vision:

Minnesota State Colleges and Universities will be intentional as we position IT services to contribute to our strategic goals. This means that a finite set of specific IT services will be provided system-wide by a central service provider for the common good of all. Three current examples are the data communications network, the Instruction Management System (D2L), and the enterprise system of record for student and financial data (ISRS). It is expected that all campuses will utilize these centrally provided services and will not establish alternative local methods of providing them.

At the same time, we will be intentional in identifying IT services that campuses will deploy and support using their own unique methods and resources. Some current examples are business workflow automation, institutional and student E-mail, institutional web presence, printing services, and desktop computer workstations.

At any given time, there will be IT services that are at various stages of a bi-directional lifecycle of discussion, experimentation, local (pilot) implementation, service standardization & consolidation, system-wide centralized implementation, and ongoing operation. We will have processes in place so that when IT services move from one stage to another governance and funding models change as well.

Assumptions:

- Enabling student success and supporting the teaching/learning process is the primary reason for having IT services
- Campus service differentiation comes fundamentally from business process change not from deploying unique-to-campus technology solutions
- Effective strategic planning is not an episode; it is an iterative process
- It is important to balance operational efficiency with fostering collaboration and innovation
- Enterprise decisions should be based, as much as practical, on the enterprise data contained in our systems of record
- Different institutions have different breadth and depth of technical expertise
- Experiments and pilots with new or emerging IT services should be intentional; communicated broadly throughout the system; with a defined beginning and end; and possessing predetermined success criteria
- Many levels of governance must be taken into account in making decisions with system-wide implications. Existing governance structures will be used to support the decision-making process

Strategies:

- The various IT service providers among Minnesota State Colleges and Universities will move from a loose affiliation of autonomous activities to a planned, coordinated effort
- Simple, standard and reliable IT services will increases system-wide quality of service and promote cost efficiency
- System-wide services will be standardized wherever possible. Unique or non-standard technology will be deployed only as an intentional exception to this default mode

The Current Situation

- The service inventory is not complete or published
- There is, on occasion, a lack of trust among campus CIOs regarding Office of the Chancellor completing timely delivery of centralized services
- There can be tension or confusion concerning which services will be offered and what the process is for engaging with others that are providing similar services
- Campuses struggle to align with informal or undocumented "standards"
- The ITS division in Office of the Chancellor can be slow to respond with emerging technologies creating pressure on Colleges and Universities to seek autonomous solutions
- It is unclear whether "cost savings" is a sufficient reason to position services centrally
- It is unclear if is it acceptable for an institution to opt-out of a centralized service
- The average budget for central computing in our two-year institutions is $1,198,531. The national average for like institutions is $5,678,889. The average budget for central computing in our four-year institutions is $7,040,000. The national average for like institutions is $18,978,369. This data indicates that centralized IT services are saving more that 100 million dollars a year for our system. (Data source: 2009 Campus Computing Project National Survey of Computing and Information Technology in America Higher Education)
- Sometimes pilot projects are launched without a process or framework to evaluate, discontinue or expand the service. This increases complexity and reduces agility for the system as a whole
- There is a lack of governance for converting pilots to system-wide services
- This is no roadmap or framework for sharing single campus technology initiatives horizontally across the system
- Staffing levels and responsibilities are not consistent from campus to campus
- Many campus CIOs use valid (but individualized) rules-of-thumb such as " if it is academic technology and not D2L support it at the campus level, if it is an administrative technology, look at what is offered at the system level, if not offered, the campus can/should do it. Finally, if my local organization can provide a service to others that can be distributed at a lower cost, provide that service."
- Regional consortia and other ad hoc collaborative efforts are operating with success
- The shared services model, as is being formed with the Campus Service Cooperative shows promise and is gaining acceptance throughout the system

Objectives: What we will do over the next 3 years.

To accomplish the vision, the following would have to take place:

- Create a comprehensive Strategic Plan for IT within and throughout the Minnesota State Colleges and Universities System; this plan will be aligned with the Board of Trustees System Strategic Plan as well as the institutional strategic plans
- Develop an ongoing process to update the IT Strategic Plan
- Create an understanding of what needs to be uniform across the system (e.g. transactional systems that automate common processes or common reporting requirements)
- Define the systems and services to be delivered centrally for the common good

- Develop a service catalog that includes pertinent data on enterprise services, services shared between institutions and individual campus services
- Create an environment that encourages everyone to participate in seeking new IT services or policies to support current and emerging business strategies
- Develop a services lifecycle that includes a process to fund and implement new services, a process for identifying and migrating technologies from campus-wide scope to enterprise-wide, and a process for discontinuing support for antiquated services

As a result:

- Enterprise-wide services will be mapped to the business processes or strategies they support
- All IT service providers will be operating from a documented and well-understood roadmap of experimental, emerging, established, and obsolete information technologies
- Stakeholders will receive value because IT services are planned, focused, aligned, and cost effective

Priorities for Change (action plan)

- Produce a project plan to identify scope, resources, and timeline
- Produce up-to-date inventory of services
  - Office of the Chancellor (system-wide enterprise infrastructure and applications)
  - Consortia/collaborations
  - Campuses
- Identify candidate services to become enterprise-wide services to avoid confusion and create cost efficiencies
- Identify 2 or 3 styles of service positioning
- Establish an ongoing process for reviewing service positioning
- Publish Enterprise Architecture roadmap
- Identify gaps or misalignments in service delivery, resources and funding
- Prioritize projects to address gaps
- Agree on overall financial plan and incremental finance rules
- Identify decisions to be made and process/responsibility to decide and act
- Plan and execute an effective change management process including executive level support

Draft: April 6, 2011

Appendix A: Execution and Anticipated Contribution Outcomes

Strategic Direction 1: Increase access, opportunity and success.
By planning and execution of aligned actions, IT services selection and placement will contribute by:

a) Reducing unnecessary duplication of service expenditure though tiers of services that optimize the effectiveness of value delivery while minimizing expenditures (goal 1.3)
b) Minimize the use of personnel resources to accomplish similar outcomes while providing sufficient cross system depth of resources and experience (via selective standardization and training) to minimize operational risks (goal 1.3)
c) Position services and system to best facilitate the focus on student graduation or transfer (goal 1.4).

Strategic Direction 2: Achieve high-quality learning through a commitment to academic excellence and accountability.
By:

a) Measuring delivery value success will be based on a criterion that includes the locating and funding of IT services in signal or multiple efficient and effective delivery options that best deliver value for education programs and student services. The selection of which optimize the overall system delivery value while supporting initiatives and flexibility needed to achieve regional or local educational objectives (goal 2.3).
b) Using approaches that build and sustain capacity in technical talent that bring and maintain service knowledge currency, professional skills and cultural competency to facilitate the overall delivery to student's educational outcomes (goal 2.4)

Strategic Direction 3: Provide learning opportunities, programs and services to enhance the global economic competitiveness of the state, its region and its people.
By:

a) Locating and funding IT services that facilitate workforce education and training that are recognized (as measured externally) as leading in the higher education field on delivery outcomes (goal 3.1).
b) Creating assets that support regional viability objectives where justified (goal 3.2).
c) Selection of appropriate ties of services and funding models that optimize individual institutions ability related to overall expenditures that allow attention to developing other capacities of value to their region and interest in meeting employees needs (goal 3.3).

Strategic Direction 4: Innovate to meet current and future educational needs.
By aligning leadership activity for academic and operational outcome effectiveness via IT services locations and funding:

a) Deliver on needs today while being future-focused (goal 4.1),
b) Fully utilize talent and sharing of personnel resources to have an aligned approach to addressing system, regional and local challenges (goal 4.2)
c) Develop accountability methods to optimize system positions and personnel resources to focus on outcome efforts that leverage the combined benefits of balancing innovation and stability.

d) Routinely examine and improve structures, technologies, policies and processes to support strategic system outcomes (goal 4.4)

Strategic Direction 5: Sustain financial viability during changing economic and market conditions.
Through:

a) Fiscal stewardship and prioritization of core mission priorities. Identify centralized, regional, campus or outsourced approaches where expenditures deliver high value outcomes (goal 5.1)
b) Rigorously reduction of unnecessary expenditure (goal 5.2)
c) Develop and leverage alternative relevant funding sources to supplant revenues from state appropriations, tuition and student fees (goal 5.3)
d) Partner whenever possible with other institutions, including the University of Minnesota, to share resources, services and purchasing processes.

Appendix B: Placement of Responsibility

This is a representative but incomplete list of services as of April 6, 2011.

Category/Component	Placement of Responsibility: System	Consortium	Institution	Program	Convergence	Investment	Current Technologies
Enterprise Resource Planning							
Course Management							ISRS
Degree Audit							Degree Audit Reporting System
Finance							SWIFT
Human Resources							SCUPPS
Student Information							ISRS
Learning Management							
Learning Management System							Desire 2 Learn
Streaming Media							Media Mill, "U of M partnership"
Email Solutions							
Student Email							Live@EDU, Gmail,
Faculty & Staff Email							GroupWise, Exchange, Live@EDU, Gmail
Web Services							
Public							Various
Private							SharePoint, etc.
Application							Various
Identity Management							
System Identity							StarID
Local Identity							Active Directory
Applications							
Resource Scheduling							Resource 25
Document Management							ImageNow, Knowledge Lake
Enrolment Management							Hobsons
Procurement							
Commodity Hardware							Dell, Hewlett Packard, Lenovo, etc.
MCA							
Software							
Supplies							
Communications							
Wide Area Network							
Local Area Network							
Core Network Services							DHCP / DNS / WINS
Telephony Services Support							
Broadcast Technical and Engineering Services Support							
Digital Signage							

ApJAppendix B: Placement of Responsibility Continued

This i: This is a representative but incomplete list of services as of April 6, 2011.

Category/Component	Placement of Responsibility: System	Consortium	Institution	Program	Convergence	Investment	Current Technologies
Security							
Security Cameras, Door Access, and Systems	●	●	●	●	●	▂▄▆	
Network, Server, and Desktop Security	●	●	●	●	●	▂▄▆	
Payment Card Industry	●	●	●	●	◔	▂	
End-user Support							
Help Desk	●	●	●	●	◑	▂	
Workstations for Staff	●	●	●	●	◑	▂	
Administrative Application Support	●	●	●	●	◑	▂	Raiser[1]s Edge, Knowledge Lake etc.
Forms and Software Development	●	●	●	●	◑	▂	
Hardware Repair Center	●	●	●	●	◑	▂	
Instructional Technology and Support							
Classroom Technology	●	●	●	●	◕	▂▄	
Instructional Design Support	●	●	●	●	◕	▂▄	
Technology Training and Professional Development	●	●	●	●	◕	▂▄	

Key

●	Inappropriate/not applicable
●	Fringe, experimental/localized/pilot/high risk/no guarantee of availability/inadvisable
●	Secondary, developmental/limited/distributed/exploratory/under consideration/low risk/moderate availability
●	Primary, production/mainstream/enterprise/preferred/adopted/low risk/high availability/funding priority
●	High convergence
◕	Moderately high convergence
◑	Moderate convergence
◔	Low convergence
○	No convergence
▂▄▆	High investment
▂▄	Moderately high investment
▂	Moderate investment
▂	Low investment
▂	No investment

Acronyms

DHCP-	Dynamic Host Configuration Protocol
DNS-	Domain Name System
ISRS-	Integrated Statewide Records System
SCUPPS-	State College & University Personnel Payroll System
SWIFT-	Statewide Integrated Financial Tools
WINS-	Windows Internet Name Service

Appendix C: *References*

- ***For interesting and elegant technology principles, see Brown University IT Strategic Plan pp. 9-11 http://www.brown.edu/cis/about/itsp_v2.pdf***
- ***For discussion of interplay between centralized services providers and campus service providers see Washington State Community and Technical Colleges' Strategic Technology Plan p. 15 http://www.sbctc.ctc.edu/docs/strategicplan/strategic_technology_plan.pdf***
- ***For an example of a plan with specific delineation of campus and centralized service provider roles see http://www.vccs.edu/Portals/0/ContentAreas/ITS/VCCS_ITStrategicPlan.pdf***
- ***Also of interest is http://cs.uwsa.edu/documents/CommonSystemsRoadmapV1_2.pdf***
- ***For information about the Campus Computing Project see http://www.campuscomputing.net/2009-campus-computing-survey***
- ***For detailed report of ITS 2011 Customer Satisfaction Survey see http://www.its.mnscu.edu/documents/Final_Draft_MnSCU_ITS_Survey_v4.pdf***

Minnesota
STATE COLLEGES
& UNIVERSITIES

WELLS FARGO PLACE
30 7TH ST. E., SUITE 350
ST. PAUL, MN 55101-7804

ph 651.296.8012
fx 651.297.5550
www.mnscu.edu

INFORMATION
TECHNOLOGY SERVICES
DATE